

were concerned with the cultivation of their fields. All the details of the grass-lodges were symbolic. The social organisation was by villages, at the head of each of which was a chief and a subchief. Election to the chieftainship was never through heredity alone; it was possible for the youngest and meanest-born boy of the village to rise to this position through bravery, generosity, and kindness. In general, the gods of the Wichita are spoken of as "dreams." The sixty tales refer to the first period or Creation, the second period or transformation, and the third period or the present. A few tunes are given by F. R. Burton. Three long Wichita tales by the same indefatigable observer will be found in the *Journal of American Folk-lore* (vol. xv. p. 215, xvi. p. 160, xvii. p. 153). Legends of ancient time were related that the listeners might realise that evil creatures and monsters and evil spirits no longer exist; they were removed from the earth and their destructive powers taken from them by Wonderful Man, who knew that the world was changing, so that human beings might be human beings, and animals exist as animals to serve as food for man. But, above all, the value of many stories for the young lay in the lesson taught by example



FIG. 1.—Hupa woman soaking acorn meal on the river shore. The meal is placed in a crater of sand, water is heated in the basket to the right by dropping hot stones into it, and the hot water is ladled out by means of a basket-cup and poured over the meal until it loses its bitter taste.

that bravery and greatness depended solely upon individual effort, and that there might befall him the same longevity and good fortune as was possessed by the hero of the tale.

In the handsome volume which contains the ninety traditions of the Skidi Pawnee collected by Dr. Dorsey, there are fifteen plates and some interesting ethnological and explanatory notes. The village was the basis of the organisation of the Skidi, no trace of the clan having been found. Each village possessed a sacred bundle, and marriage was endogamous in each village. The religion of the Pawnee reached a higher development than that of any other of the plains tribes, and its ceremonial side was especially developed among the Skidi. Each bundle ceremony and each dance was accompanied, not only by its ritual, but by its tale of origin, and all of these are regarded as personal property. Dr. Dorsey makes some interesting remarks upon the ownership and telling of the tales. Of these some are cosmogonic; a number tell of boy heroes in which the path to renown is due to fixity of purpose and a humble spirit. Numerous tales relate to the tricky coyote; these are

told whenever the men assemble during the winter months, but never during the summer, or rather during those months when snakes are visible, for at such times the Coyote-Star directs the Snake-Star to tell the snakes to bite those who talk about the coyote. In one group of tales there is a marriage between humans and animals, or the transformation of a man into an animal.

The first volume of the University of California Publications, American archaeology and ethnology, contains a study of the Hupa by Mr. P. E. Goddard. The Hupa Indians occupy the beautiful lower valley of the Trinity River; so secluded was it that sixty years ago the news of the coming of the white man had not reached the inhabitants. The people seem to have lived a simple, peaceable life; their social organisation was very simple, but more information is required. A family consisted of a man, his wife or wives, his sons and their wives, the unmarried and half-married daughters and unmarried or widowed brothers and sisters of the man and of his wife. There appears to have been a classificatory system of relationship. The next social unit was the village; a man lived and died where he was born; the women married into other villages. Each village was ruled by the richest man. There seem to have been no formalities in the government of a village or tribe. There was a deep undercurrent of religious feeling, and a great reverence for the spoken word.

The texts are word for word translations and anglicised versions of fourteen myths and tales, and thirty-seven texts relating to the dances and feasts, the majority of which are formulæ. The latter are of especial value, as it is usually so difficult to get the exact words of a magical formula. Thirty excellent heliotype plates embellish the volume.

Mr. Goddard and the university authorities are alike to be congratulated on this excellent piece of work, which augurs well for the success of the new department of the University of California.

A. C. H.

A NATURALIST'S JOURNAL.¹

THIS daily journal of an observant field-naturalist may be heartily welcomed by every lover of country life and country scenes. It is true the style is somewhat scrappy and *staccato*, but this is to a great extent unavoidable in a work of this nature, and is, after all, no great drawback, although we think it might have been somewhat modified during the revision for press. Mr. Robinson, who is already no stranger to the reading public, has the good fortune to be a resident in Norfolk, the county *par excellence* of redundant bird-life and of enthusiastic bird-lovers; and he is therefore practically assured of a number of sympathetic readers, for every dweller in Norfolk likes to be acquainted with all that is written about his own district.

To the general reader the most attractive feature of the book will almost certainly be the large series of exquisite reproductions from photographs of animal and plant life, taken, we infer, by the author himself. Where all are of such high excellence, it is difficult to make a selection; and the illustration we present to our readers as a sample must not be regarded as either better or worse than its fellows. It has been chosen on account of its depicting an interesting phase of bird-life.

As a rule, the author has nothing specially new to

¹ "The Country Day by Day." By E. K. Robinson. Pp. xix + 371 illustrated. (London: W. Heinemann, 1905.) Price 6s.

tell, and his book may be regarded as a guide to what the observant country resident ought to see and notice, rather than as an exponent of fresh facts. In places, indeed, he forsakes his usual style for what we suppose must be called "word-painting," but we can scarcely congratulate him on the result of the change. Neither, we think, is he altogether happy in his theory that bird-song is largely due to rivalry and jealousy; although his eagerness to trace out the reason of every phenomenon in natural life is a trait deserving of the highest commendation.

The reader who follows in Mr. Robinson's foot-

A short time previously, Huxley, assisted by T. J. Parker, had begun to organise his pioneer practical classes in biology at South Kensington, and Howes's first scientific work consisted in making a series of enlarged coloured drawings illustrating the anatomy of various animals, and thus further developing his powers as a draughtsman. These drawings now form the well known series hanging on the walls of the laboratory at the Royal College of Science, copies of which were subsequently made by Howes for use in various universities and colleges in this country and abroad. Although he had no previous scientific

training, he rapidly became an expert anatomist, and many of his exquisite dissections are still to be seen on the shelves of the laboratory.

All this time, Howes was taking every advantage of his opportunities for studying under our greatest biological teacher in a school of high tradition, where students are able to devote themselves to one subject at a time, and are fortunate in being unhampered by syllabuses. He was soon appointed assistant demonstrator, and on Parker's election to the chair of biology in the University of Otago, Howes succeeded him as chief demonstrator, so that his originality, zeal, and enthusiasm had full scope for development. The wide knowledge he gradually obtained of his subject, his valuable contributions to zoological literature, and more especially his power

and influence as a teacher, soon made it apparent that he was to take an important place in the scientific world. On Huxley's partial retirement in 1885, Howes was appointed assistant professor, and in 1895—when the chair of biology was subdivided—professor of zoology. During his career as demonstrator, he had also for two years held the post of lecturer on comparative anatomy to the St. George's Hospital Medical School.

In 1897, Howes was elected to the fellowship of the Royal Society. He was a vice-president of the Zoological Society, honorary zoological secretary to the Linnean Society, honorary treasurer of the Anatomical Society, ex-president of the Malacological Society, president of Section D of the British Association at the Belfast meeting, corresponding member of the New York Academy of Science, and an honorary member of the New Zealand Institute. He also took an active interest in the work of several local natural history societies, of which he was a member. In 1902 he acted on the committee for the reorganisation of the Zoological Gardens, and in the same year received the degree of D.Sc., *honoris causa*, in the Victoria University, having previously—in 1898—received that of LL.D. at St. Andrews. He had held examinerships in several universities, e.g. London, Oxford, Victoria, and New Zealand.

The veneration and affection which Howes felt for his great chief were unbounded, and apparent in all his work, to carry on which on the lines laid down by Huxley was the summit of his ambition.

His publications are too numerous to be mentioned in detail; they consist of some fifty papers and



FIG. 1.—Young Peewit hiding. From "The Country Day by Day."

steps and takes him as guide will not have much to learn about the animals and plants of his native district after a year's diligent apprenticeship.

R. L.

PROF. G. B. HOWES, F.R.S.

GEORGE BOND HOWES, whose state of health for the past two years had been the cause of grave anxiety, passed away on February 4. Born in London on September 7, 1853, his active and useful life was cut short at the age of fifty-one.

Howes was of Huguenot extraction; his father, the late T. J. Howes, married the daughter of the late Captain G. H. Bond—a member of a talented family. While attending a private school he spent his spare time in making microscopical slides, and a prize of one of J. G. Wood's books helped to arouse further his interest in natural history. His parents at first intended that he should prepare for entering the Church, but this plan was given up, and on leaving school he was for a short time in business, which proved very distasteful to him. Having worked out the anatomy of the house-fly, made careful drawings of his preparations, and given a lecture on the subject, his talent was recognised by a friend of the family—a clergyman—who introduced him to Mr. Walter White, then secretary to the Royal Society. Through Mr. White's instrumentality an introduction was obtained to Prof. Huxley, and this resulted in an appointment under the Science and Art Department.